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DEPARTMENT OF TELECOMMUNICATIONS
College of Arts and Sciences
Bloomington

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Federal Communications Commission
Office of the Secretary

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March 2, 2010

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: Notice of Ex Parte Communication
GN Docket No. 09-191; WC Docket No. 07-52

Dear Ms. Dortch,

On February 26, 2010, Prof. David Waterman, Dept. of Telecommunications, Indiana University at Bloomington, met with Mark Bykowsky, Office of Strategic Planning and Policy Analysis; Sharon Gillett, Wireline Competition Bureau; Zachary Katz, Office of Strategic Planning and Policy Analysis; and David Tannenbaum, Office of General Counsel, following a seminar presented by Prof. Waterman at the Commission on Feb 25.

This letter summarizes points made to FCC staff at the Feb. 26 meeting that are in addition to those made in a set of Powerpoint slides which were presented on Feb. 25 and are attached to this letter.

The objectives of the Open Internet rules are a good idea overall, but it will be difficult to frame the rules because it is difficult to predict how the ISP or the IP content market will develop. It is thus important that the Commission carefully think through possible scenarios of market developments and industry responses to the rules.

As discussed on Feb. 25, a non-discrimination access rule by itself can shift similar discrimination activity upstream to the content service market level or downstream to the consumer market level. In general, this occurs because if a

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group of firms has several alternative routes to pursue a given objective, and one of those routes is restrained by a rule, those firms will more frequently choose one of the alternative routes. The particular effects of a rule on discrimination activity will vary by situation. Even though discrimination is likely to grow in other parts of the market, a non-discrimination access rule is likely to reduce discrimination behavior overall.

Consumers' perception of whether a non-discrimination rule is fair is important.

The ISP discrimination issue is more appropriately framed as a terminating monopoly problem than a question of how to balance the bargaining power of content providers and ISPs. The former is the more fundamental economic issue, although the cable industry experience shows that the latter is important to predicting a rule's possible effects on entry and innovation in program content.

The Feb. 25 presentation focused only on the programming industry. But a lot of the same ideas transfer to Voice over IP (VoIP) and other services ISPs may provide. On the other hand, the more extreme economies of scale in programming distinguish it from other products.

The program access rules in cable have apparently worked well, and it may be worth considering analogous rules in the Internet context. Such rules would require that prices charged by ISPs to content holders (and vice versa) have to be uniform. That kind of rule would be directed at precluding tacit exclusivity arrangements and ideally should apply to all programming content, not just vertically integrated content.

Sincerely,

/s/

David Waterman
Professor

Attachment: The Experience of Vertical Control in Cable Television: Implications for Network Neutrality (Powerpoint presentation)

The Experience of Vertical Control in Cable Television: Implications for Network Neutrality

David Waterman
with
Sujin Choi

Dept. of Telecommunications
Indiana University
Bloomington, IN

Federal Communications Commission

Feb. 25, 2010

Focus

- **Professionally produced AV content** (TV/movies/video)
- **The need for a non-discrimination rule for broadband ISPs**
- **Vertical control** (common ownership of ISPs and program content services)
- **Two main issues**
  1. **Discrimination against unaffiliated online content services** (program supply market)
  2. **Program access/exclusivity** (ISP market)

Some Goals to Achieve

- Low prices, high variety and quality of programming
- Innovation in programming
- Access by content suppliers to consumers
- Access by consumers to content

Questions

- Will unconstrained ISPs "favor" their vertically affiliated online content services and restrict entry/subscriber access to "rival" content services?
- Will unconstrained ISPs restrict competing ISPs from access to their vertically affiliated-content services?

Approach

- Analogies with historical experience of cable TV industry

Limitations

- Many other considerations: System investment; uncertainties of IP content development; antitrust vs. regulation.....

Overview of Answers

- ❑ Will ISPs “favor” their vertically affiliated online content services and restrict entry/subscriber access to “rival” content services?

- ❑ Will ISPs restrict competing ISPs from access to their vertically affiliated-content services?

✓ *The cable experience suggests yes to both questions, but the focus should be on horizontal concentration and program content more generally--not vertical integration.*

✓ *By itself, a non-discrimination access rule is likely to reduce ISP incentives to discriminate at the program content service level and to promote facilities-based ISP competition. However, similar discrimination behavior is likely to be shifted upstream to the content service level or downstream to the consumer retail level.*

Issue #1

Discrimination by vertically integrated ISPs against unaffiliated online content services

(program supply market)

Review of Vertical Effects Research

- A history of extensive vertical ties between MSOs and cable programming networks since the late 1970s.

- Several studies compared program menus, pricing and subscribership data on local cable systems with and without vertical ownership ties to program suppliers.

  - Chen & Waterman, 2007; Chipty, 2001; Goolsbee, 2007; Waterman & Weiss, 1996;1997.

Vertical Effects Studies: Summary of Key Findings

- Integrated cable systems more likely to carry affiliated networks than are other systems.
- Unaffiliated “rival” networks less likely to be carried—or if carried, tend to be marketed unfavorably, or (in recent cases) put onto less accessible digital tiers.
- Carriage effects diminish in larger capacity systems--but they persist.
- Carriage effects diminish with DBS competition.
- Carriage of well-established networks (eg, CNN, HBO, AMC in later years) are unaffected by vertical integration.

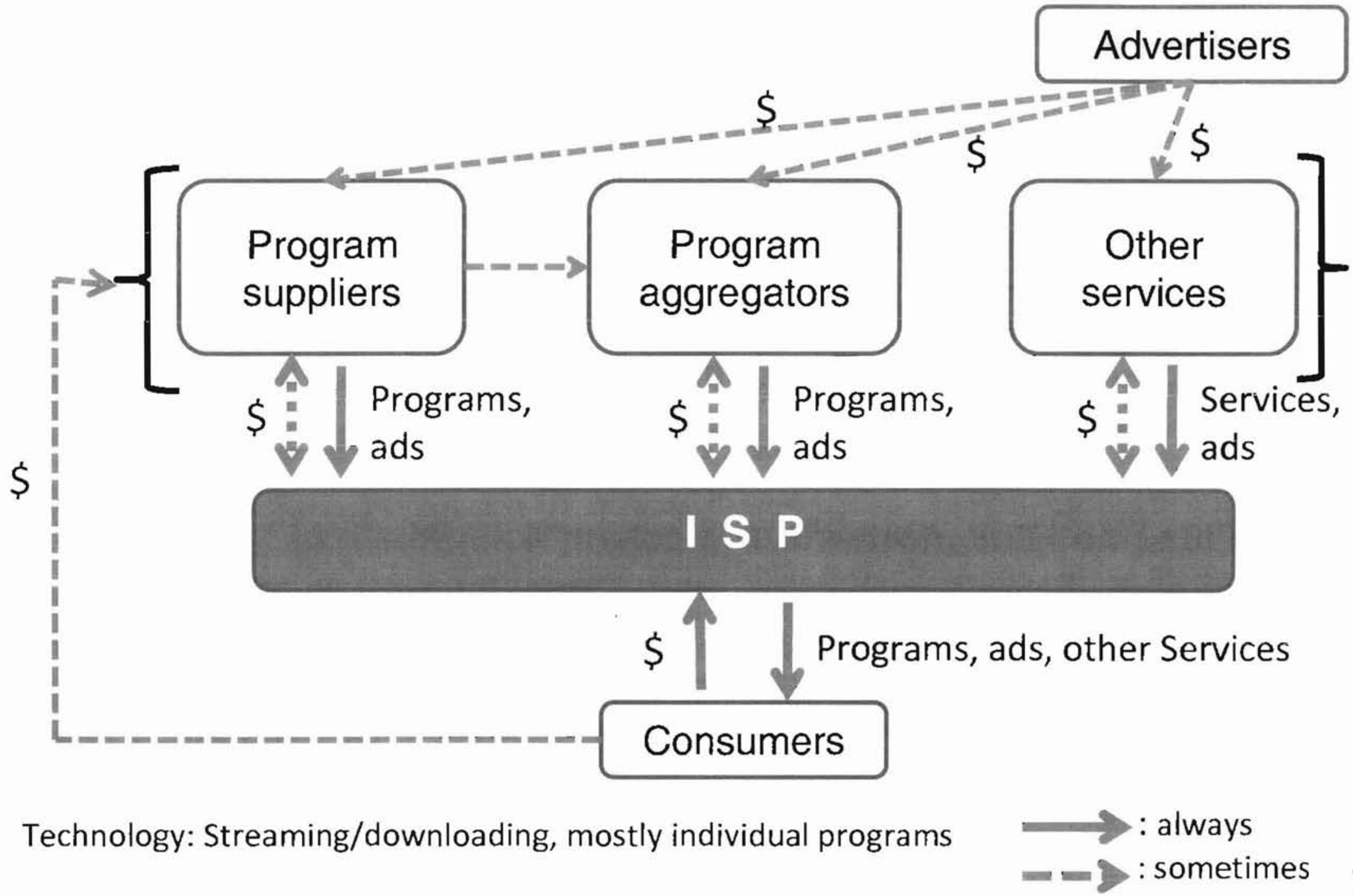
Possible Explanations for Observed Vertical Effects in Cable

- **Strategic behavior to enhance profits of affiliated networks**
  - eg, alleged behavior of premium movie networks in 1980s-90s
  - eg, possible interpretation of analog carriage of the affiliated Cartoon Network and digital tier carriage of the unaffiliated Toon Disney on Time-Warner systems in 2000's
- **More efficient contracting with affiliated networks**
  - Lower transaction costs, lower risk
- **It is difficult to distinguish pro-competitive from anti-competitive strategies or welfare effects.**

Limits on this Behavior

- **Subscriber demand for high program diversity, local competition**

Current ISP Video Economic Architecture



Technology: Streaming/downloading, mostly individual programs

Illustrative Major Services Offering Online Professionally Produced AV Entertainment Content

Online Sites	Primary Content	Main Business Model
Hulu	Fox, ABC, NBC broadcast TV programs; cable programs	Ads
TV	CBS broadcast programs	Ads
iTunes	Broadcast programs, movies	PPV/purchase/sub
Blockbuster	Movies, broadcast programs	PPV/purchase/sub
Netflix	Movies, broadcast programs	Free with DVD mail sub
ESPN 360	Live streaming of games	Ads; ISP fees
Fancast	27+ broadcast/cable networks	Ads; free to offline cable subs
PBS	PBS broadcast programs	Free

Key Features of Online Professionally Produced Entertainment Content Services

- **Prevalence of content aggregators** (from multiple content owners) (eg, Hulu, iTunes, Blockbuster, Netflix, Fancast)

- **Some program exclusivity** (eg, popular broadcast shows), **some not** (eg; major movies); many partnership/search engine links

- **Market dominance of syndicated content**; a variety of original programming by aggregators and standalone sites

- **Overall, nascent state of the IP content industry and business models**

Three conclusions about ISP discrimination....

Conclusion 1

Unconstrained ISPs have basically the same incentives as cable operators to favor their vertically affiliated content services and restrict entry/subscriber access to rival services.

...but concerns shift from individual content suppliers toward unaffiliated content aggregators

- *Unaffiliated content suppliers have multiple routes of access via competing content aggregators*
- *Incentives to discriminate mitigated by ISP retail competition; viability and diversity of competing content services.*

Common Features of ISP and MVPD Market Structures

- **Potential market power at local retail level**
  - Cable: 68.2%; DBS: 29.2%* (national MVPD sub shares)
  - Broadband: local cable operators: 46%; local telcos: 35%** (national sub shares)

- **Significant national ownership of local retail firms**
  - Cable: Comcast (22.4%); Time Warner (11.5%)*** (MVPD shares)
  - Broadband: AT&T (14.8%); Comcast (14.7%)****

- **Potentially significant vertical integration with content services**

* FCC (2009), p.81, **Comments of Dish network L.L.C., Docket 09-191, p.3
*** FCC (2009), p.146. **** Comments of AT&T, Docket 09-191, p. 118

Conclusion 2

A non-discrimination access rule for ISPs by itself would likely reduce discrimination but likely to shift discrimination activity to the downstream retail level or to the upstream content service level.

- *Price discrimination in consumer market could accomplish the same purpose*
  - *eg, price discounts/promotions for affiliated content services*
- *Dominant upstream aggregators integrated with content could discriminate against nascent unaffiliated content suppliers*
  - *network effects may limit aggregator competition*
- *Empirical significance difficult to predict due to early stage of IP content industry.*

Conclusion 3

The focus on vertical integration as a barrier to content innovation and entry is misplaced.

- *Yes, as in cable, vertical integration can facilitate ISP discrimination or foreclosure behavior at the content service level*

but:

- *The same result can be accomplished with or without integration*
  - *eg, ISP preferential retail pricing or delivery priority for unintegrated "content partners."*

- *Horizontal market power at the content or ISP level is the basic issue*
  - *Significant national and local shares are needed to affect competition in content supply.*

Potential Benefits of Vertical Integration to Innovation and Entry in IP Content Supply

- **Active involvement of MSOs in early launches of cable networks**

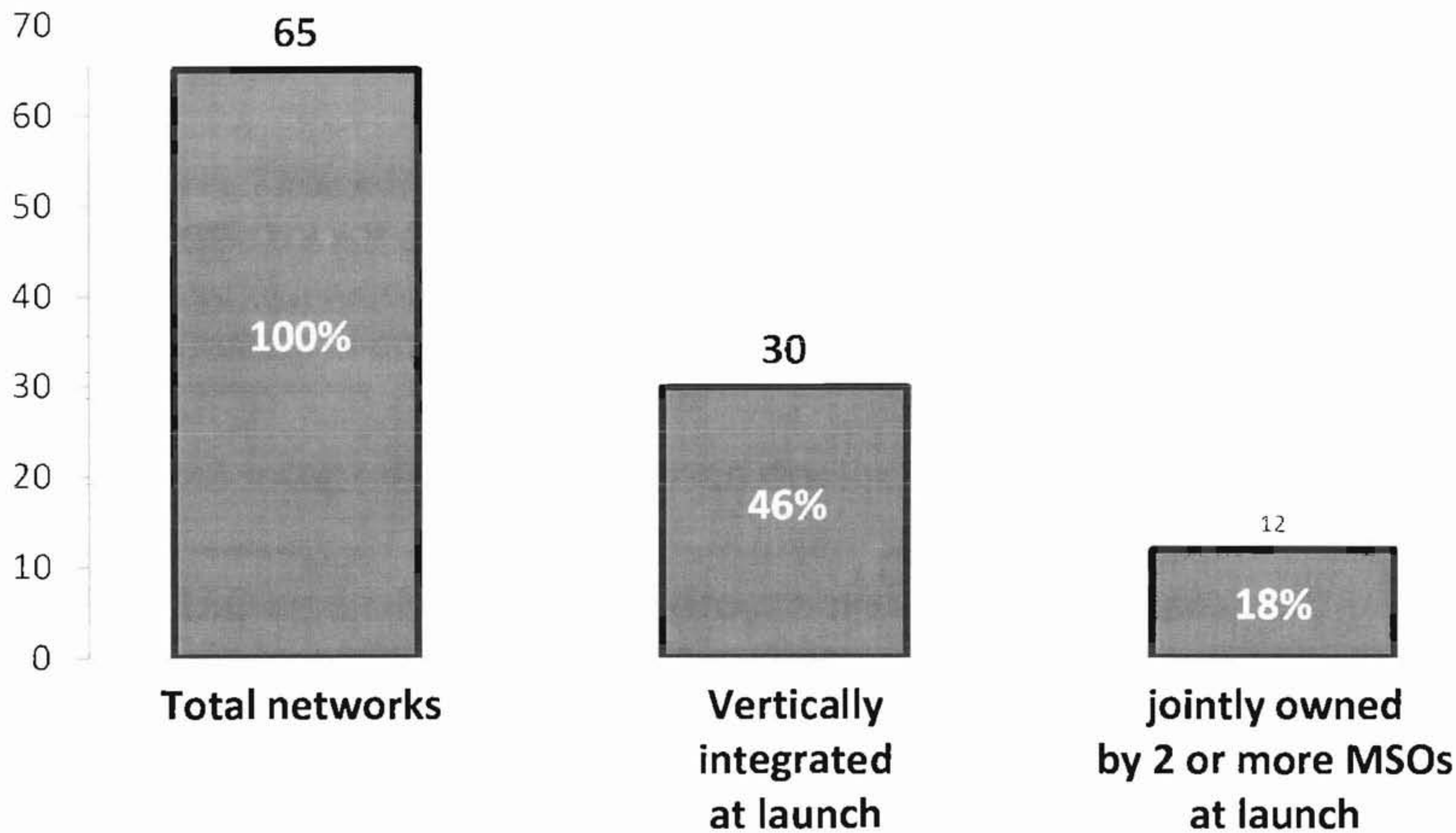
- **Apparent benefits of vertical integration in cable to content innovation and entry**
  - Financial resources
  - Signaling of commitment, risk reduction

- **Vertical integration in cable has declined**

- **But MSO and DBS affiliated program suppliers remain very active in launching new cable networks**

# networks launched 2002-2006	MSO/DBS affiliated	
	#	%
85	31	36.5%

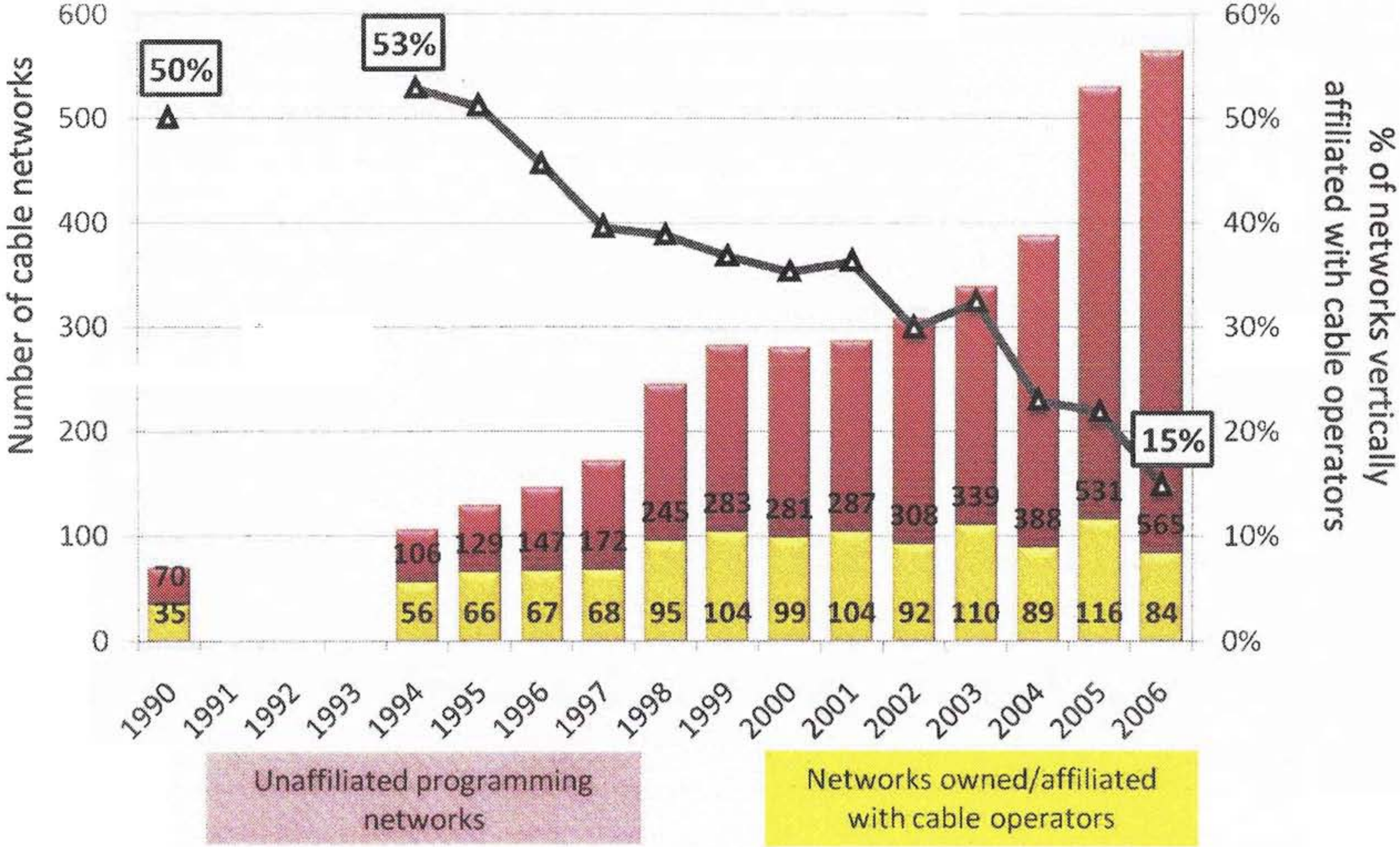
Ownership Status of the 65 Largest National Cable Programming Networks, 1994



* Include all basic and PPV networks reaching at least 10%, and premium networks reaching at least 1% of MVPD households as of the end of 1994.

Source: Compiled from Waterman & Weiss (1997) based on Cable TV Factbook, Paul Kagan Associates

History of Vertical Integration between Cable Operators and National Programming Networks



Source: FCC (1995-2009)

Top 15 Owners/Equity Holders of New Cable TV Networks Launched in Past 5 Years**, as of 2006

	Owner	# Networks launched
1	EchoStar	***16***
2	Cablevision	***15***
3	Viacom	***8***
4	Comcast	***6***
5	Cox	***6***
6	Advance Newhouse	***5***
7	Disney	***5***
8	Discovery Holding	***5***
9	Hearst	***5***

	Owner	# Networks launched
10	Liberty Media*	***5***
11	NBC-Universal	***5***
12	Time Warner	***4***
13	CBS Corporation	***3***
14	EW Scripps	***3***
15	News Corp.	***3***
Total unique networks** held by Top 15		***58***
Total Launches** (All owners)		***86***

* Liberty Media held 16% of News Corp. stock

**not including 249 "Foreign Language" networks and 28 networks without launch date information.

Source: Compiled from FCC (2009), pp. 149-181.

Application to IP content

- **Comparable benefits of ISP vertical integration to content innovation and entry seem to apply**

- **These benefits may be less significant than in cable**
  - Greater role of program aggregators, which can also vertically integrate
  - The rise of large unaffiliated program content suppliers with bargaining power and financial resources to launch cable or IP content services
  - Cable network launch is now dominated by these large suppliers--integrated and not integrated

Top 15 Cable TV Network Owners/Equity Holders (Ranked by # of networks, 2006)

	Owner	# Networks owned/affiliated		Owner	# Networks owned/affiliated
1	Time Warner	***32***	9	Advance Newhouse	***17***
2	Viacom	***28***	10	Discovery Holding	***17***
3	Disney	***28***	11	CBS Corporation	***16***
4	Liberty Media*	***24***	12	EchoStar	***16***
5	News Corp.	***21***	13	NBC Universal	***14***
6	Hearst	***20***	14	Comcast	***11***
7	Cablevision	***19***	15	Univision	***8***
8	Cox	***19***		All networks	***565***

* Liberty Media held 16% of News Corp. stock
Source: Compiled from FCC (2009), pp. 149-181.

Summary: Three Conclusions about ISP Discrimination against Unaffiliated Content Services

1 Unconstrained ISPs have basically the same incentives as cable operators to favor their vertically affiliated content services and restrict entry/subscriber access to rival services.
...but concerns shift from individual content suppliers toward unaffiliated content aggregators

2 A non-discrimination access rule for ISPs by itself would likely reduce discrimination but likely to shift discrimination activity to the downstream retail level or to the upstream content service level.

3 The focus on vertical integration as a barrier to content innovation and entry is misplaced.

Issue #2

Program Access / Exclusivity Issues

(ISP Market)

Experience with program access/exclusivity in cable

❑ United States

- cable exclusive and "cable-friendly" programming in 1980s and early 90s; regional sports networks

❑ Other countries

- Including U.K., Australia, Italy, France, Netherlands in the 1980s-90s

Some Common Features of Program Access/ Exclusivity Experience in Cable

- **High demand programming involved**
  - In cable, mostly premium movies, some sports
- **Usually practiced by a dominant retail level firm competing with nascent competitors**
- **Vertical control often involved, but in other cases not.**
- **Exclusivity episodes usually temporary**
- **Usually government intervention has been involved**
  - Merger deals; program access rules; non-discriminatory access agreements

The need for further study of foreign market cases

Three Conclusions about ISP Exclusivity/Program Access Issues

1 A non-discrimination rule would presumably promote facilities based competition, but may shift strategic exclusivity/access restriction behavior to the content service level.

- Empirical extent depends on competition at ISP level, demand for content differentiation

2 Anti-competitive or pro-competitive effects of exclusivity can easily be achieved with or without vertical integration

- eg, ISP "content partnerships"

3 A program access rule applied to ISPs for integrated and non-integrated content services would permit input pricing flexibility by ISPs.

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